

D.C. Draft Phase 1 WIP

Public Meeting

September 29, 2010

National Zoo Visitor Center

Hamid Karimi

Deputy Director Office of Natural Resources
District Department of the Environment

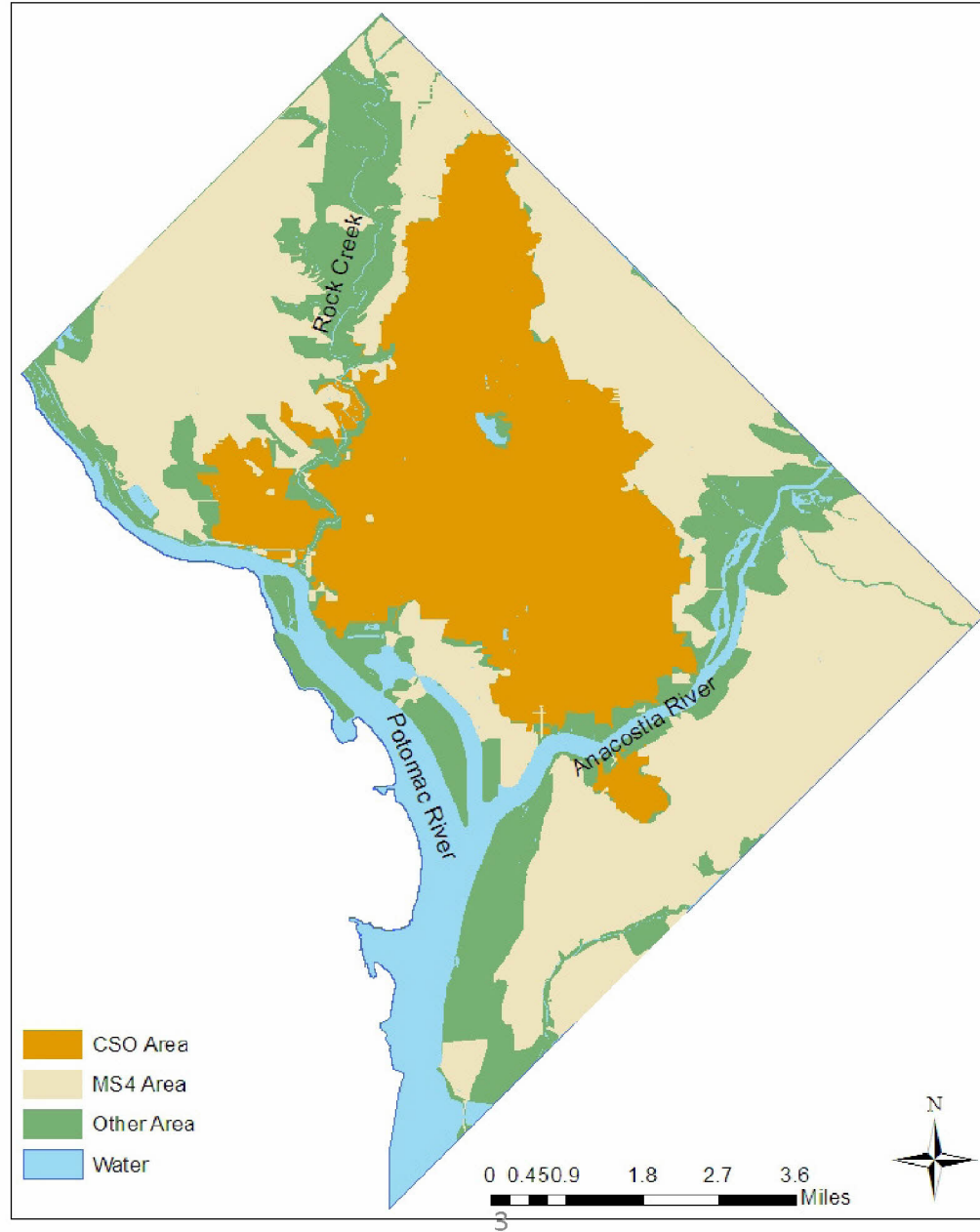


Support for EPA Bay TMDL

- DC has met previous Chesapeake Bay Agreements
 - First to meet the Nitrogen goal
- Bay TMDL will help meet The District's water quality goals
- Bay TMDL will lessen the amounts of pollution passing through District waters from other jurisdictions



District of Columbia Source Areas



D.C. Water Quality Issues

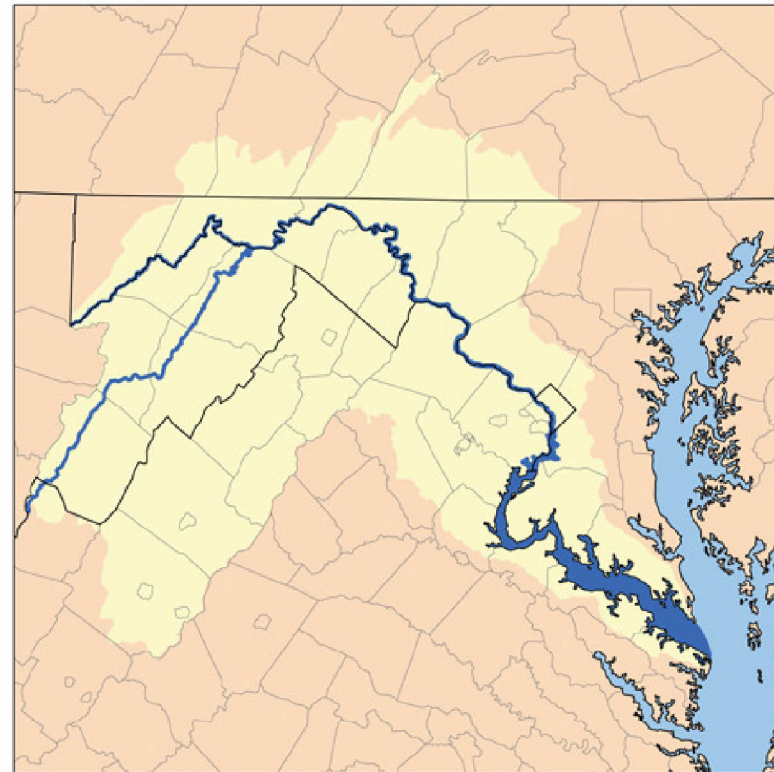
- The sections of the Potomac and Anacostia Rivers that lie within the District's boundaries carry pollution from other jurisdictions
- D.C. is almost a totally permitted urban area; therefore our focus is primarily on sources such as: municipal waste water treatment plants (WWTP), CSOs and stormwater runoff



DC Water Quality Issues

The Potomac River is the main water body in D.C.

- The Potomac receives runoff from five jurisdictions:
Pennsylvania, Maryland, West Virginia, Virginia and D.C.
- 0.5% of the Potomac watershed lies within D.C.



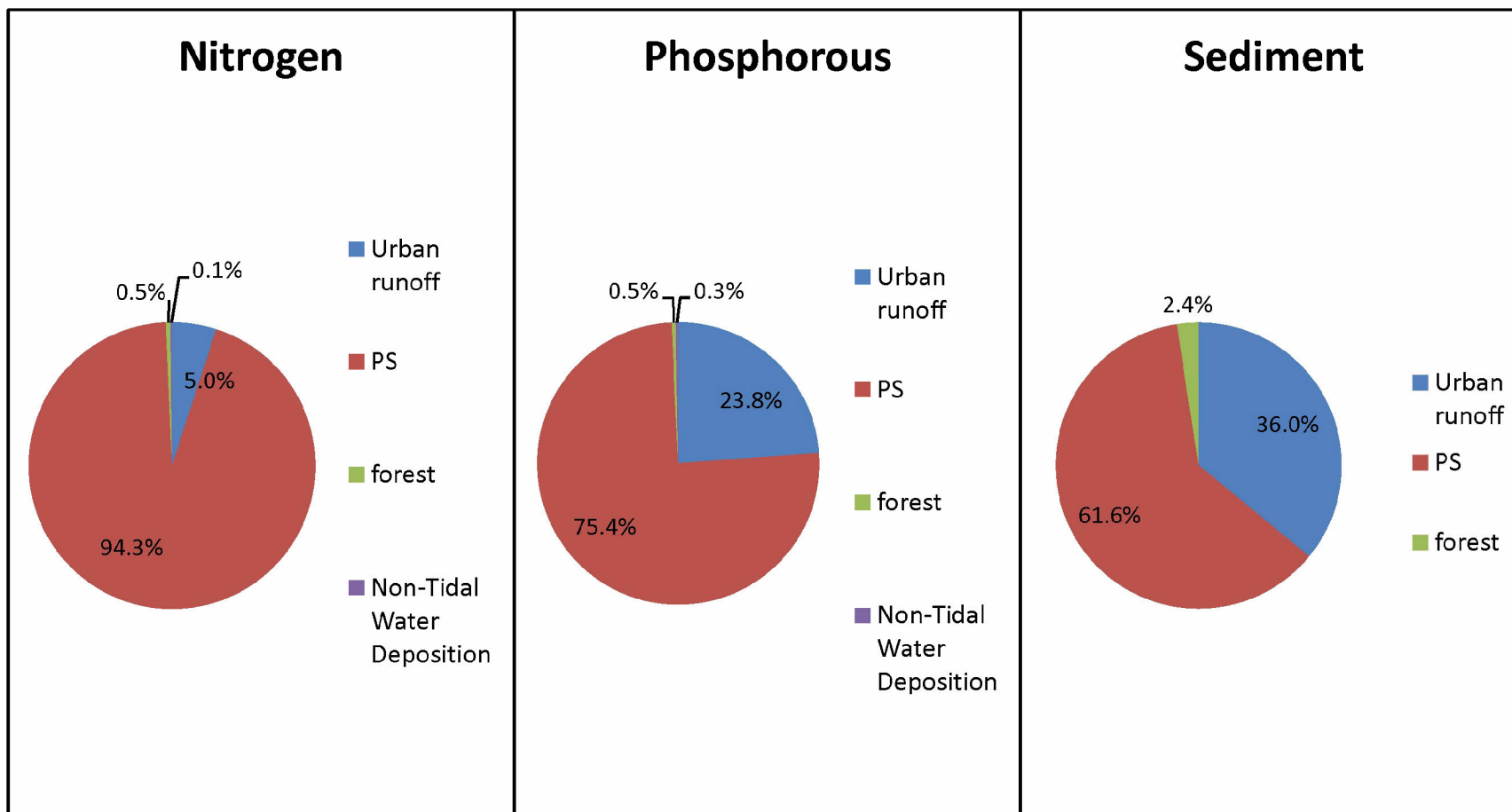
DC Water Quality Issues

The Anacostia River is one of the most polluted tributaries in the Chesapeake Bay Watershed

- 82% of the Anacostia watershed lies within Maryland, 18% in D.C.

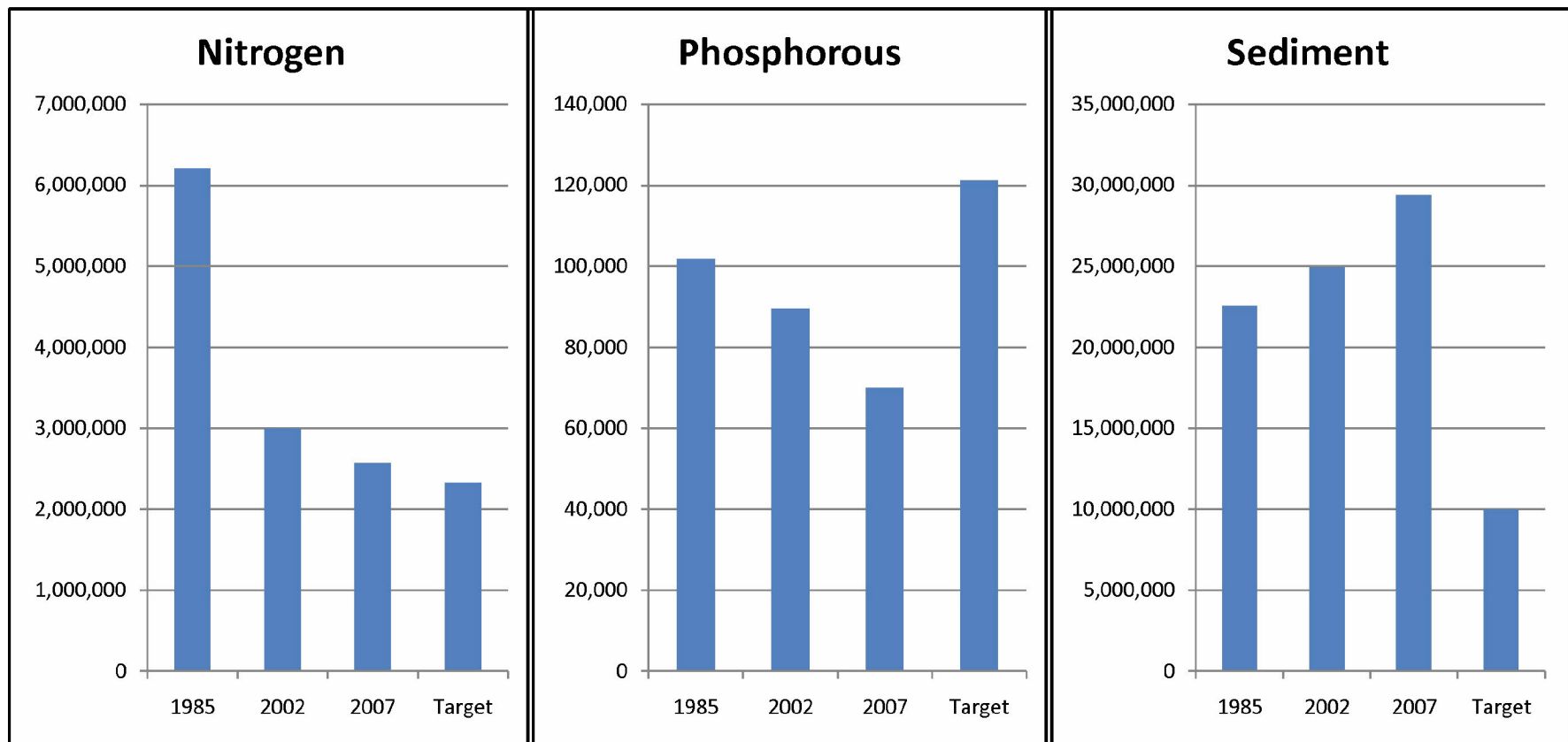


Nutrient Sources in DC



Values from July 2010 Phase 5.3 Model Run

D.C.'s Progress in Reducing Loads since 1985



Values from July 2010 Phase 5.3 Model Run



Current and Draft Target Loads (in million pounds per year)

	Nitrogen		Phosphorous		Sediment	
	Current	Target	Current	Target	Current	Target
Bay-Wide	468.44	203.14	29.71	12.52	13,236.6	6,066-6,673
D.C.	2.6	2.32	0.07	0.12	29.4	10-11

Values from July 2010 Phase 5.3 Model Run



Allocations

Phase 1

DC lies entirely within the Potomac Basin and therefore was issued one state-basin allocation for Nitrogen, Phosphorous and Sediment that will be allocated among different source sectors:

- Blue Plains
- CSOs
- MS4
- Non significant facilities
- Other (traditional nonpoint sources and forest)
- Growth

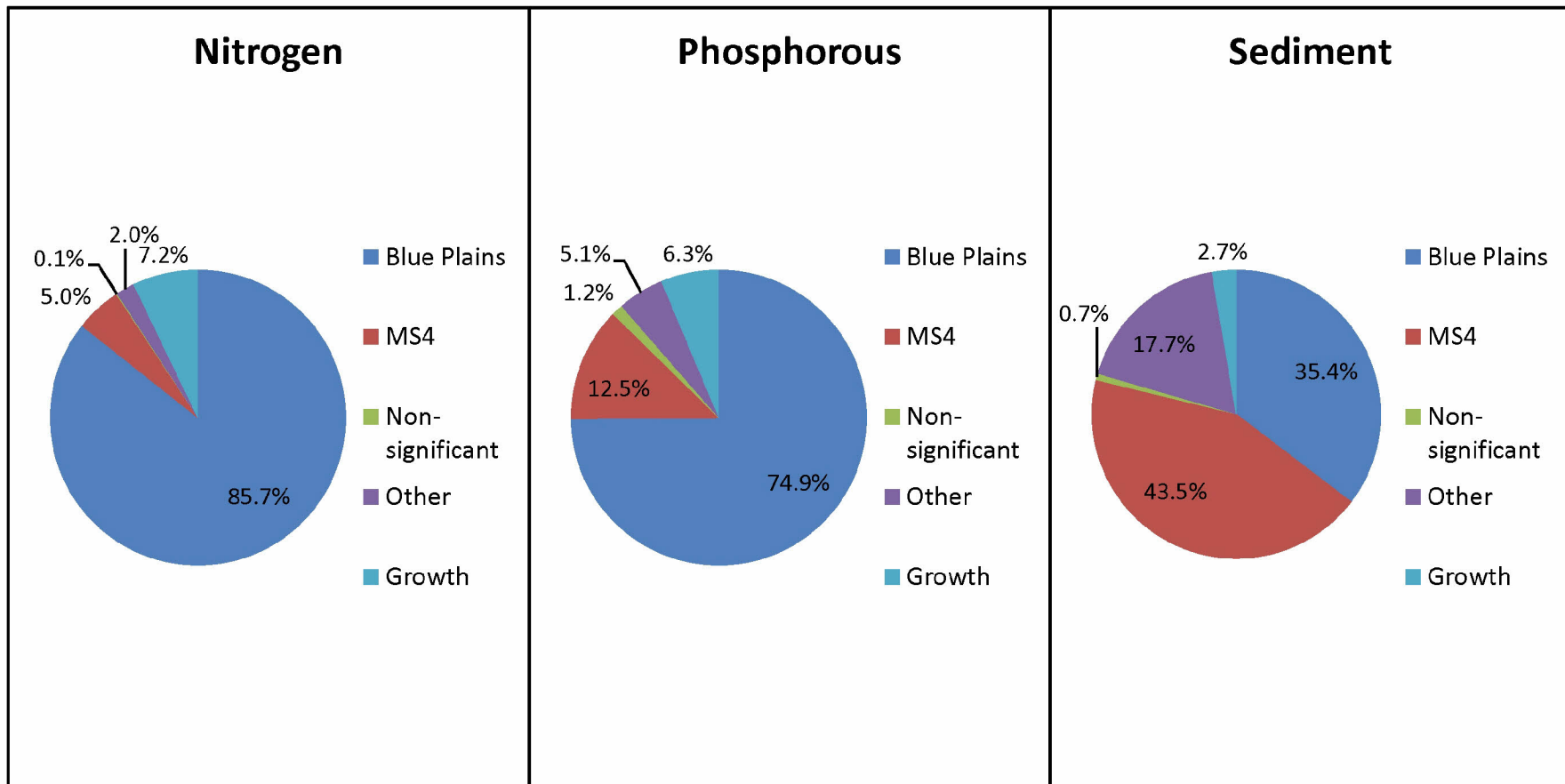


D.C.'s Strategy for Load Allocation

- Majority of the load assigned to Point Sources
- Specific loads allocated to Blue Plains and MS4 permits
- Blue Plains load allocation will address the treatment plant as well as CSO's



Allocation Among Source Sectors



As indicated in D.C.'s September 1, 2010 Draft WIP



D.C.'s Path to Progress

DC Water (DC WASA) has Developed and is Implementing:

- Enhanced Nitrogen Removal for the Blue Plains WWTP (cost: approximately \$1 billion dollars)
 - Removes additional Nitrogen from wastewater before being discharged
 - Improves quality of discharge to Anacostia and Potomac rivers during wet weather events
 - Expected to be completed in 2015
- Long Term Control Plan for CSOs (cost: approximately \$2.2 billion dollars)
 - Will reduce CSO overflows by 96%
 - Expected to be completed in 2025



D.C.'s Path to Progress

Washington Aqueduct

- Constructing a residuals processing facility that will cut current sediment loading by 99%
- Solids processing facility will contribute to reductions in Nitrogen and Phosphorous as well where N & P are bound to sediment particles
- Expected to be completed in September 2011



D.C.'s Path to Progress

Erosion Control & Stormwater Management Regulations and MS4 Permit

- One of the most aggressive in the country
- A new Permit is expected to be issued in the Fall of 2010
- The draft permit contained an aggressive retention and green infrastructure approach heavily relying on infiltration, water harvesting/reuse and evapotranspiration
 - All of which will help DC work towards the sediment allocation load and will be included in the Final Phase 1 WIP



D.C.'s Path to Progress

- Erosion Control & Stormwater Regulations
 - D.C. is developing new regulations which will put in place the framework to implement WIP requirements
- Accounting for Growth
 - Redevelopment is common in the District and is subject to stormwater regulations
 - Redevelopment normally increases stormwater retention thereby decreasing Nitrogen, Phosphorous and Sediment loading
 - Growth in D.C. is expected to be mainly in the wastewater sector from increased population
 - This is reflected in the loading numbers for Blue Plains Advanced Waste Water Treatment Facility

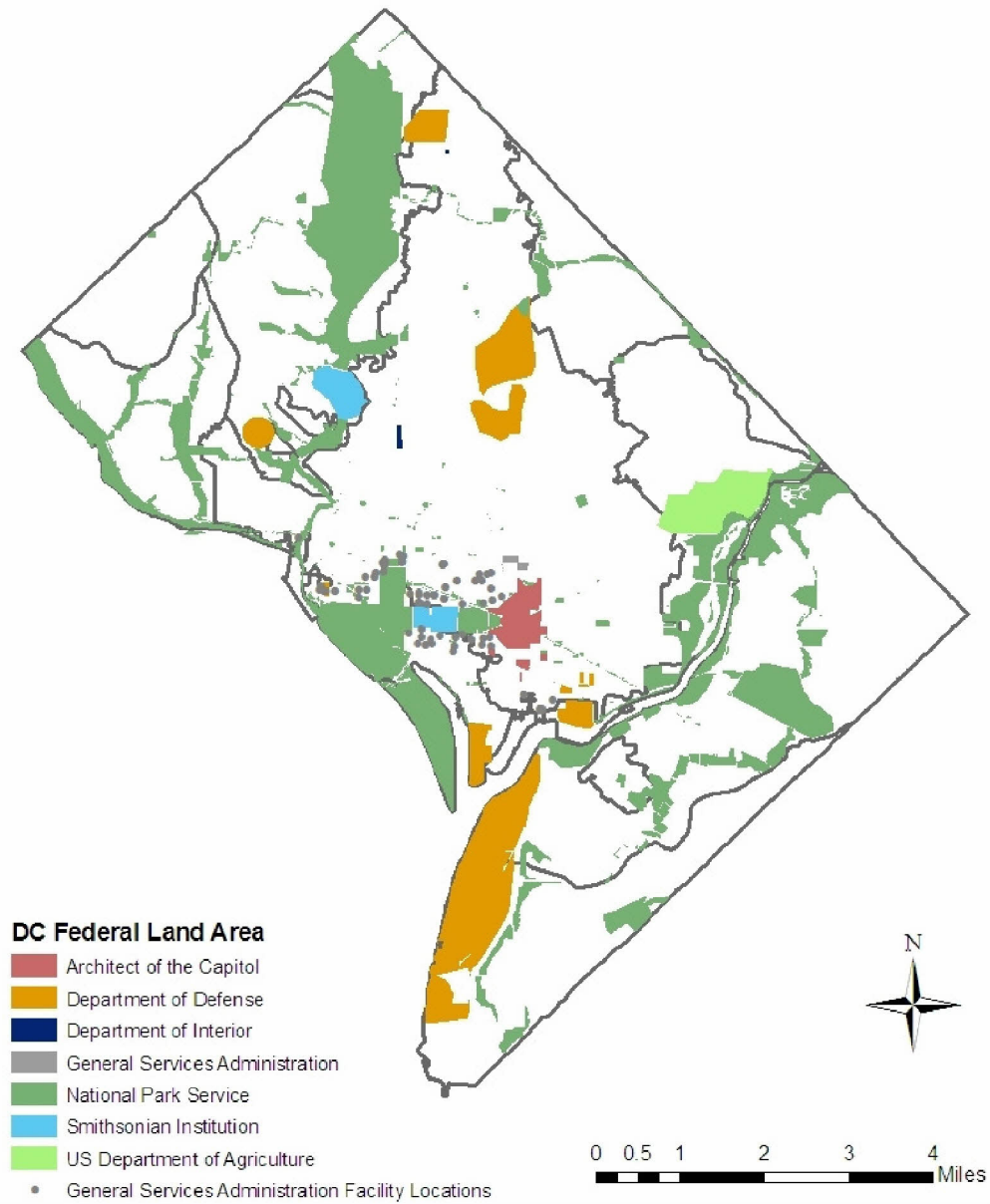


Sediment Issues

- D.C. considers itself to be on the forefront of Sediment control technologies
- D.C. has the strictest Sediment and Erosion Control regulations in the Chesapeake Bay Watershed
- D.C. cannot meet the Draft sediment allocation



District of Columbia Federal Land Area



Partnership with Federal Facilities

- Federal facilities comprise 30% of District Land
- D.C. is working toward developing a Federal partnership framework that will facilitate implementation and tracking of restoration efforts in the District
- D.C. hopes to have the Federal facilities participate in the 2-yr milestone process
- D.C. expects the EPA and Federal Leadership Committee to work with D.C. to increase overall Federal partner cooperation



Programs that are in Place to Minimize Stormwater Impacts to Water Quality

- Tree Planting
- Stream and Wetland Restoration
- RiverSmart Homes, Schools, Rooftops
- Street Sweeping
- Catch Basin Cleaning, Replacement & Retrofits
- Extensive LID Construction
- Scoop your Poop – pet waste disposal campaign



Programs that are in Place to Minimize Stormwater Impacts to Water Quality

- Review and Inspect Construction Projects for Sediment & Erosion Controls (over 50 sq ft)
- Inspect BMPs and LIDs for proper installation and maintenance
- Enforce and Investigate Illicit discharges to the waters of the District
- Inspect MS4 outfalls
- Inspect auto shops, laundromats & dry cleaners



Tracking and Reporting

- Blue Plains, the MS4 System and the Washington Aqueduct all report to D.C. and the EPA through a Discharge Monitoring Report
- D.C. reports on non-point source programs through yearly submissions to the Chesapeake Bay Program Office
- D.C. will provide data into ChesapeakeStat as it is the key mechanism to track progress



2 Year Milestone Accomplishments

- DDOT planted 4,150 trees in 2009, which helps to increase urban tree canopy coverage by 5 percent (from 35 percent to 40 percent) in 25 years
- Through June 2010 approximately 600,000 sq ft of Green roofs have been installed District-wide (200,000 sq ft were installed in 2009)
- DDOE has installed 700 rain barrels on residential properties
- In 2009 DDOE initiated and held a full day workshop with 5 federal agencies to explore creative ways to implement the Energy Independence and Security Act (EISA)
- DDOE held two training workshops on source controls (pollution prevention) to all its sister agencies in 2009 and 2010
- Anacostia Trash TMDL was approved by EPA on September 21, 2010



2 Year Milestone Accomplishments

- DDOE has conducted 266 facility inspections
- DDOE developed an aggressive Pet Waste Strategy in 2009 and will begin marketing it this calendar year with schools, parks and riparian communities
- Watts Branch restoration designs are pending final approval. Construction will begin on stream restoration in late 2010; sewer line work will be concurrent with construction work
- Pope Branch designs for stream restoration and sewer replacement is scheduled to be complete in October of 2010. Construction will begin shortly thereafter
- DDOE and DC Water began charging an impervious stormwater fee in May 2009



Important Links/Contacts

Draft DC WIP:

<http://ddoe.dc.gov/ddoe/cwp/view,a,1210,q,494609,ddoeNav,%7C31007%7C.asp>

Draft Bay TMDL:

<http://www.epa.gov/chesapeakebaytmdl/>

DC Contacts:

Monir Chowdhury, Ph.D.: monir.chowdhury@dc.gov

Diane Davis: diane.davis2@dc.gov

Sarah Sand: sarah.sand@dc.gov

